Claims:

1. An evaporative condenser without cooling fins comprises:

a medium coil body including a plurality of lateral streamline cross sectional bare metal tubes parallel fixed on two supporting plates at two opposite ends of said tubes, which said streamline cross sectional tube has a front head portion and a rear tail portion;

a water supply system to provide a water film continuously to the surface of said coil tubes;

a wind system to provide a wind flow in a direction headed to said front head portion thoroughly over the surface of said rear tail portion of said streamline tubes to evaporating said water film rapidly so as to absorb a large amount of latent heat of water evaporating, in which types of wind systems are classified by the direction of wind flow, namely upward blow type, downward blow type, lateral blow type and tilt blow type.

2. An evaporative condenser according to claim 1, wherein said front head portion of said streamline tube with a cross section has a shorter and gradually enlarged form while said rear tail portion has a longer and gradually reduced form.

3. An evaporative condenser according to claim 1, wherein said streamline cross sectional tube has a tail fin extended from a rear edge of said rear tail portion thereof.

4. An evaporative condenser according to claim 1, wherein said water supply system comprises:

a plurality of water spray nozzles for spraying fog-like water particles onto the surface of said coil tubes continuously;

a water collecting pan disposed under said medium coil body to collecting residual water drops not be evaporated on time;

a water reservoir to receive the residual water from said water collecting pan having a floating valve to control an inlet of city water for maintaining a predetermined water level therein and a small-sized high pressure pump to feed water or said spray nozzles therefore.

5. An evaporative condenser according to claim 1, wherein said upward-blow type apparatus is comprised of :

a plurality of said streamline tubes of said medium coil body having their front head portion headed to a downward direction;

at least one of said water spray nozzle disposed under said medium coil body to spray water particles upwardly onto the surface of streamline tubes;

at least one of exhaust fan of said wind system disposed in an outlet opening at a top to draw the wind upwardly passing through said medium coil body to speed up the evaporation of water on the surface of said streamline tubes and to exhaust the heat and hot air there from.

6. An evaporative condenser according to claim 1, wherein said downward-blow type apparatus is composed of:

a plurality of streamline tube of said medium coil body having their front head portion headed to a upward direction;

at least one of said water spray nozzle disposed on a top over said medium body spraying water particles downwardly onto the surface of said streamline tubes and formed water films thereon;

at least an electrical fan of said wind system disposed in an air inlet opening at a top to supply wind downwardly passing through said streamline tubes from said front head portion over said rear reduced portion thereof.

7. An evaporative condenser according to claim 5, wherein said wind

system further comprises an air-water separating layer of plastic pieces disposed under said exhaust fan to separate the water particles from air thereat.

8. An evaporative condenser according to claim 6, wherein said wind system further comprises: an air-water separate layer of plastic pieces disposed under said medium coil body for separating the residual water particles from air and steam thereat.

9. An evaporative condenser according to claim 4, wherein said water supply system are additionally disposed in said medium coil body between layers of streamline tubes for supply water particles layers be layers.

10. An evaporative condenser according to claim 4, wherein said water supply system further comprises a residual water heat exchanger for cooling the residual water before collected to said water collecting pan to avoid an accumulating of temperature raising of recycling water.

11. An evaporative condenser according to claim 10, wherein said residual water heat exchanger is composed of a plurality of vertical layers of plastic fins.

12. An evaporative condenser according to claim 11, wherein said plastic fins of said heat exchanger have their surface in a concave and convex irregular form.